

NOVEL ISOFORMS OF HUMAN PREGNANCY-ASSOCIATED PROTEIN-E

ABSTRACT

The invention provides isolated nucleic acids  
5 that encode three novel isoforms of human pregnancy  
associated plasma protein E, hPAPP-E, and fragments  
thereof, vectors for propagating and expressing PAPP-E  
nucleic acids, host cells comprising the nucleic acids  
and vectors of the present invention, proteins, protein  
10 fragments, and protein fusions of the novel PAPP-E  
isoforms, and antibodies thereto. The invention  
further provides transgenic cells and non-human  
organisms comprising human PAPP-E isoform nucleic  
acids, and transgenic cells and non-human organisms  
15 with targeted disruption of the endogenous orthologue  
of the human PAPP-E gene. The invention further  
provides pharmaceutical formulations of the nucleic  
acids, proteins, and antibodies of the present  
invention, and diagnostic, investigational, and  
20 therapeutic methods based on the PAPP-E nucleic acids,  
proteins, and antibodies of the present invention.